PHASE I ARCHAEOLOGICAL RESOURCE REVIEW AND DISTURBANCE ASSESSMENT FOR THE PROPOSED CUY-OPPORTUNITY CORRIDOR PROJECT (PID 77333) LOCATED IN THE CITY OF CLEVELAND, CUYAHOGA COUNTY, OHIO





Submitted by:
Ohio Department of Transportation
Office of Environmental Services
Cultural Resources Unit
Columbus, Ohio

November 2012

ABSTRACT

An archaeological resource review and disturbance assessment was conducted by the Ohio Department of Transportation, Office of Environmental Services in the City of Cleveland, Cuyahoga County, Ohio. The proposed Opportunity Corridor project involves the creation of transportation infrastructure to improve access from Interstate Route 490 to the University Circle area in Cleveland and to facilitate economic development through an area containing large tracts of vacant industrial and residential land. The study area containing the Opportunity Corridor project was divided into three sections (western, central, and eastern) and a historic context was developed for each section. Two prominent historic themes were identified: the history of Nathanial Doan and Doan's Corner in the Euclid Avenue/East 107th Street area (eastern section) and the history of a former Hungarian neighborhood located near Buckeye Road (central section). These two themes were investigated further by the Office of Environmental Services once a preferred alignment was identified.

Review of aerial photography and cartographic resources suggests the entire project area has been heavily developed and redeveloped over the last 60 years. An archaeological field review performed in December 2011 and October 2012 confirmed widespread disturbance as a result of industrial, commercial, and residential development, transportation development and construction, cut-and-fill activities, and storage yard development. The area of Doan's Corner at the eastern termini has been thoroughly disturbed, specifically as a result of Hospital expansion and development (along with associated underground utilities). Inspection of the project area (the footprint of the proposed project) through the Hungarian neighborhood/Buckeye Road area determined that three to six feet of fill had been placed across the area, specifically between Grand Avenue and Tennyson Road. Several houses in the area had been recently razed and evidence of bulldozing was observed across the area as well.

Based on the amount of disturbance documented in the area and the nature of urban land and udorthents, archaeological remains would consist mainly of mixed, post-industrial and modern deposits with no real distinction between once distinct traditional/cultural expressions in the archaeological record. Much of the fill observed during the field review contained construction debris from the razing of structures both within the area and outside, which was brought in with fill, subsequently creating a blended archaeological context. Background research also reveals a substantial amount of documentation on the material culture of the Hungarian population and the daily life in the Buckeye Road area. Further archaeological investigations along the proposed project's footprint in the Buckeye Road area are unlikely to yield significant information beyond that which other researchers have presented. Therefore, no further archaeological investigations are recommended. However, this recommendation does not preclude the existence of significant archaeological remains in other areas beyond the preferred alternative relating to the Hungarian population. It is likely, that important information can be recovered in other, better preserved parts of the neighborhood. Therefore, if the scope of the proposed Opportunity Corridor project changes, further archaeological consideration would be required.

TABLE OF CONTENTS

Oblique Aerial Photos taken in Fall 2012

Abstracti	
Acknowledgementsii	
List of Figuresiii	
Introduction	
Literature Review/Historic Contexts	
Archaeological Field Review15	
Summary and Recommendations2	
References	
Appendix A:	
Preliminary Schematic Plan Sheets for the Opportunity Corridor Project	
Appendix B:	

ACKNOWLEDGMENTS

PROJECT PERSONNEL

ARCHAEOLOGICAL FIELD DIRECTOR: Jason Watkins

ARCHAEOLOGICAL FIELD CREW: Stanley W. Baker

LITERATURE REVIEW/PROJECT HISTORY: Jessica Mayercin

Megan Shaeffer Jason Watkins

REPORT PREPARATION: Jason Watkins

LIST OF FIGURES

- 1. State of Ohio map showing the study area.
- 2. Cuyahoga County map showing the study area.
- 3. Portions of the Cleveland North, Cleveland South, East Cleveland and Shaker Heights 7.5' topographic maps showing the project vicinity.
- 4. Portions of the Cleveland North, Cleveland South, East Cleveland and Shaker Heights topographic maps showing the three sections of the study corridor.
- 5. Previously surveyed areas, previously identified archaeological sites, and cemeteries in and around the proposed project area.
- 6. Aerial photo (2012) showing the intersection of I-490, East 55th Street, Bower Avenue and the reported location of site 33CU498.
- 7. Oblique aerial photo looking east showing portions of the Western Section.
- 8. View looking southwest along East 68th Street toward Kinsman Road showing areas disturbed by gravel parking areas and fill.
- 9. View looking southwest showing areas previously disturbed by residential development and roadway construction. Kingsbury Run Valley is in the background.
- 10. View looking east-northeast showing areas along Rawlings Avenue previously disturbed by fill.
- 11. Aerial photo (2012) showing the demolition of the industrial complexes in the Central Section.
- 12. View looking north-northeast showing areas previously disturbed by parking lot construction.
- 13. View looking north showing areas between Grand Avenue and Lisbon Road disturbed by fill.
- 14. View looking northwest showing areas disturbed by multiple episodes of filling activity.
- 15. View looking north from Tennyson Road showing areas of new fill over older episodes of fill.
- 16. View looking southwest along Tennyson Road showing areas of fill.
- 17. Photograph of a soil core showing typical disturbed soil profile encountered below fill layer.
- 18. Oblique aerial photo looking north showing the eastern portion of the Central Section and areas between Woodland Avenue and Quincy Avenue.
- 19. Oblique aerial photo looking east showing areas along East 105th Street disturbed by modern development.
- 20. View looking north along East 105th Street just north of the Norman Avenue/East 105th Street intersection.
- 21. View looking south along East 105th Street at its intersection with Euclid Avenue.
- 22. View looking south across a portion of the Ronald McDonald House toward Euclid Avenue.
- 23. View looking northeast toward East 105th Street from its intersection with Chester Avenue.

INTRODUCTION

The Office of Environmental Services completed a literature review and archaeological disturbance assessment for the proposed CUY-Opportunity Corridor project which will extend from the western terminus of I-490 to the East 105th Street/Chester Avenue intersection (Figures 1 through 3). The purpose of the Opportunity Corridor project is to create the transportation infrastructure to improve mobility and access in southeast Cleveland and support the revival and redevelopment of large tracts of vacant industrial and residential land within an area bounded by Cedar Avenue on the north, East 55th Street on the west, Woodhill Road/East 93rd Street on the east, and Union Avenue on the South. Adjacent to this area are I-490 and I-77 to the west and the University Circle area, Cleveland's second largest employment center, to the northeast. Currently, the local street grid is missing an east-west arterial between Woodland and Union Avenues, and a north-south arterial between East 55th Street and East 93rd Street/Woodhill Road. An improved local street and improved access to the freeway system could support new development and redevelopment within the area.

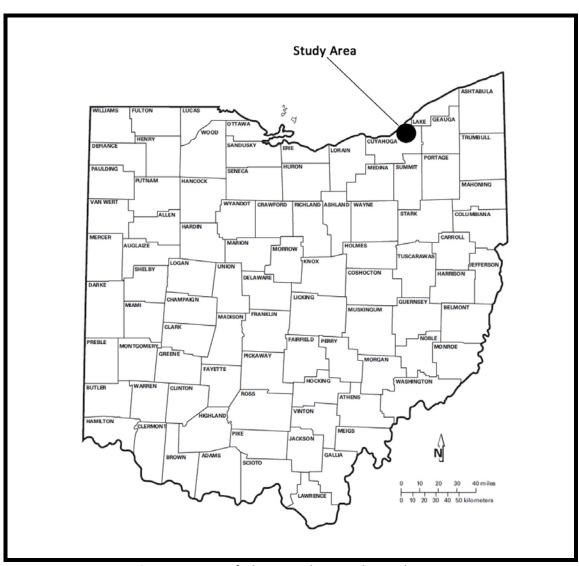


Figure 1. State of Ohio map showing the Study Area.

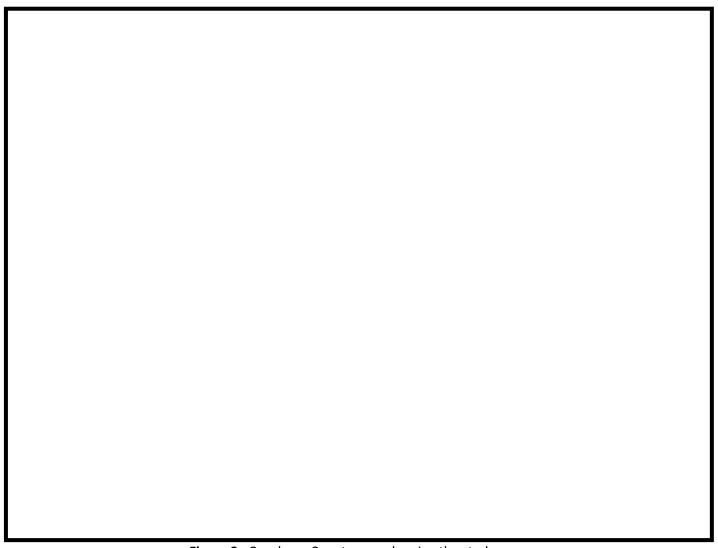


Figure 2. Cuyahoga County map showing the study area.

The study area, as preliminarily defined, begins just east of the western terminus of I-490, south of the Greater Cleveland Regional Transit Authority line (GRCTA) red, blue, and green lines as well as the Norfolk Southern (NS) Nickelplate Line. From here it continues to run south of the GCRTA and NS lines, approximately parallel to them, until it turns north and crosses them at Quincy and Quebec Avenues. At this point, the proposed boulevard connects to E. 105th Street, heading north to end at the E. 105th Street/Chester Avenue intersection. In the development of the alternatives for this project and for convenience of discussion, the preliminary study corridor was divided into three sections: *Western Section, Central Section*, and *Eastern Section* (Figure 4). The Survey Area is discussed below in terms of the recommended alternative as depicted in mapping provided in Appendix A.

Western Section

The Western Section encompasses areas between the western terminus of I-490 and E. 79th Street. The recommended preferred alternative calls for a bridge over the proposed boulevard to be constructed on E. 55th Street. A quadrant intersection would provide full access between E. 55th Street, the freeways, and the proposed boulevard. A new bridge would be constructed, over Kingsbury Run Valley at the existing GCRTA train loop, leading to a new four-legged, signalized intersection at Kinsman

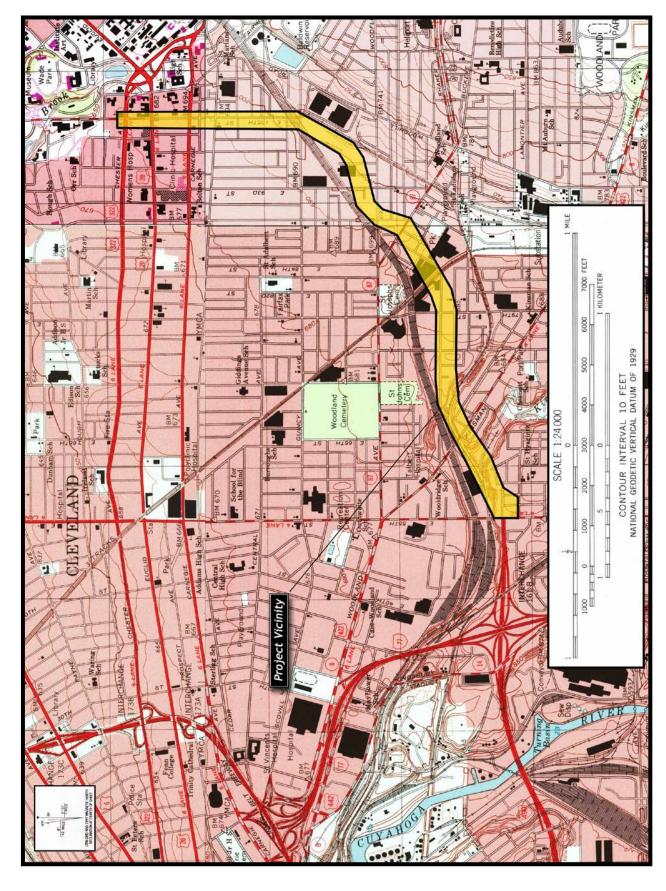


Figure 3. Portions of the Cleveland North, Cleveland South, East Cleveland and Shaker Heights 7.5' topographic maps showing the project vicinity.

Road and E. 66th Street. Kinsman Road would be widened by one lane to incorporate left-turn lanes onto the proposed boulevard, and pavement width would also be increased. East of Kinsman Road, a new bridge would be constructed over the GCRTA Blue/Green lines with the alignment that would adjoin existing Grand Avenue west of E. 75th Street. Berwick Road, Colfax Road, and E. 73rd would be either connected to the proposed boulevard or disconnected via a cul-de-sac near the proposed boulevard. E. 57th Street, E. 66th Street, and E. 68th Street would be removed. Francis Avenue and Bower Avenue would be partially removed.

Central Section

The Central Section extends from E. 79th Street to Quincy Avenue. At both the E. 75th Street and E. 79th Street intersections four-legged intersections are proposed. E. 79th Street would be widened by one lane to provide left-turn lanes onto the boulevard. East of E. 79th Street, an underpass structure is proposed to take the boulevard under the NS tracks. The boulevard would then cut across Evins Avenue, Grand Avenue, and Evarts Road to connect via a four-legged intersection with Buckeye Road just south of E. 87th Street. Buckeye Road would be widened by two lanes to provide dual westbound left-turn lanes and a single eastbound left-turn lane onto the boulevard. Northeast of this, a new fourlegged intersection would be created at the current Woodland Avenue/E. 89th Street intersection. Woodland Avenue would be widened by one lane to provide left-turn lanes onto the proposed boulevard. North of Woodland Avenue, the alignment will run generally parallel to the GCRTA Red Line and adjoin with E. 105th Street at a new four-legged intersection at Quincy Avenue. Cul-de-sacs would be created on E. 89th Street north of the GCRTA line and south of the proposed boulevard. The southwestern end of Lisbon Avenue would require a cul-de-sac and a connector road would be constructed between Lisbon and Grand Avenues, north of the proposed boulevard alignment. Tennyson Avenue and E. 87th Street would be removed, and Evins Avenue would be removed or connected to the proposed alignment.

Eastern Section

The Eastern Section consists of the area along E. 105th Street from Quincy Avenue to a point just north of Chester Avenue. The existing E. 105th Street bridge over GCRTA and NS would be widened. The roadway would be widened on the east side from Quincy Avenue just north of Cedar Avenue. North of Cedar Avenue, the roadway widening would vary along both the east and west side of E. 105th Street through the Chester Avenue intersection. Carnegie Avenue would be widened by one lane to provide a westbound dual left-turn onto the proposed boulevard.

Figure 4. Portions of the Cleveland North, Cleveland South, East Cleveland and Shaker Heights topographic maps showing the three sections of the study corridor.

LITERATURE REVIEW/HISTORIC CONTEXTS

The CUY-Opportunity Corridor study area is located in an upland setting found east of the Cuyahoga River Valley. The project area crosses the northern edge of the Till Plain Physiographic region (specifically, the Galion Glaciated Low Plateau) just behind or south of the Lake Plain Physiographic Region. This area is characterized as a rolling upland transitional between the gently rolling Till Plains and the hilly Glaciated Allegheny Plateau (Brockman 1998). This data implies archaeological resources should be found at or near the modern ground surface because of the lack of potential for alluvial deposits such as those found in stream valleys.

Geology

Examination of the USDA/SCS (1980) soil survey and the USDA/NRCS Web Soil Survey shows, unsurprisingly, that the preliminary study corridor is composed entirely of urban soil types or udorthents (see Figure 7 and Table 1 for soil types throughout the corridor). Udorthents, loamy (Ua) are areas of cut and fill where construction, borrow, or disposal activity has taken place. Urban land (Ub) describes areas of dense construction, usually where more than 80% of the ground is covered by manmade structures or surfaces such as concrete or asphalt. The Urban land-Elnora, complex nearly level (UeA), Urban land-Mahoning complex, undulating (UmB) and Urban land-Mitiwanga complex, undulating (UnB) soils are all comprised of approximately 70% urban land and 20% Elnora loamy fine sand/Mahoning soil/Mitiwango soil (respectively), with the remaining 10% composed of small areas of other soil types (USDA/SCS 1980:46-49). Given this information and taking into account the past and present land use in the project area, it is highly unlikely that pockets of undisturbed soils remain in which prehistoric archaeological materials might be found.

Table 1. Soil Types found throughout the CUY-Opportunity Corridor project area.

Ua	Udorthents, loamy
Ub	Urban Land
UeA	Urban land—Elnora complex, nearly level
UeB	Urban Land—Mahoning complex, undulation
UnB	Urban land—Mitiwanga complex, undulation

Prehistoric Context

According to William C. Mills' Archaeological Atlas of Ohio (1914), there are a total of 42 prehistoric features and structures in Cuyahoga County. Mills states that "[a]t least half a dozen mounds and one enclosure existed upon the present site of the city of Cleveland" (p. 18). Nearly all of these structures, however, seem to have been closer to the Cuyahoga River, beginning just north of the current boundary of Brooklyn Township and extending to the Lake Erie coast. None of them are in or adjacent to the preliminary study corridor (Figure 6).

The earliest archaeological survey of the Cuyahoga county area was initiated in 1838 by Colonel Charles Whittlesey. Whittlesey began mapped the forts, enclosures and mounds throughout the country and published his findings in an 1871 work entitled *Ancient Earth Forts of the Cuyahoga Valley, Ohio*. Whittlesey's study and excavations lead to naming the remains of Late Woodland inhabitants of northeast Ohio as the "Whittlesey Tradition" (Brose 1996; Murphy 1968). Research on the Whittlesey sites in the 1960s showed that only one hilltop enclosure remained in any identifiable condition (located on Rocky River), the others having been demolished or covered by modern construction (Murphy 1968). According to Colonel Charles Whittlesey (1867), a low mound had been visible in a vacant lot at the corner of Erie and Euclid Streets in 1867. However, as with the rest of the mounds and enclosures found within Cleveland city limits, the industrialization of the city soon lead to the destruction of the mound as new buildings were constructed (Whittlesey 1867: 33).

Historical records of settlers' encounters with the Native American groups of northwest Ohio indicate that the primary inhabitants throughout the 1700s were the Five Nations (Iroquoian groups) and Hurons, or Wyandots. The British and French had each established trading posts west of the Cuyahoga River as far as Sandusky by 1776 (Whittlesey 1867: 56-60). General Moses Cleaveland, who led a group of men from the Connecticut Land Company to establish and plot the city of Cleveland, interacted with Native American groups in Buffalo, New York. Cleaveland's negotiations with the Six Iroquoian Nations and the Massasagoes groups lead to the ceding of Native American lands along (and west of) the Cuyahoga River (Grabowski and Van Tassel 1996). A great deal of difficulty exists in determining exactly which groups may have inhabited Cuyahoga County, as many were river travelers who moved up and down the Cuyahoga and its neighboring waters on a regular basis, however, records indicate the following Native American groups resided in the area known as the Western Reserve: Seneca, Ottawa, Onondaga, Oneida, Cayuga, Chippewa, Mingo, Massangas, Shawnee and Delaware (Cherry 1921: 165-168).

As much of the city of Cleveland began its urban development in the first half of the 19th century, it is very likely that most prehistoric cultural materials that had been in the area have long since been disturbed by the industrial, commercial, and residential development of Cleveland and the surrounding areas. With one exception (33CU73), all of the Ohio Archaeological Inventory sites within a one kilometer radius of the project study limits are catalogues of historic (mainly industrial, with some residential) remains. In fact, prehistoric cultural deposits are unlikely and no further archaeological investigations are recommended based on the physical context of the project area to be described later in this report.

Historic Context

Provided here is a general outline of the historic context and how neighborhoods were once used along the corridor. The aforementioned history/architecture report may be referred to for more detailed information. Generally speaking, the majority of the area remained rural through the early 19th Century until the city of Cleveland encroached on the area by platting and urban development during the fourth quarter of the 19th Century.

Eastern Section

The eastern section of the proposed project encompasses some of the earliest historic settlement areas in the city. The northernmost portion of the present undertaking is, according to OGS records, near Doan's Corner (often Doan's Corners) cemetery. Doan's Corners was one of the earliest

settled areas in what would later become Cleveland. Nathanial Doan first bought land here and built a cabin near what is now the northwest corner of Euclid Avenue and E. 107th Street in 1799. This structure served as a hotel and tavern for new settlers and travelers. Doan later added a store, a smithy, and a saleratus production plant (saleratus is a leavening agent used in baking). Eventually Doan became a justice of the peace, postmaster, and clergyman in addition to a successful businessman (Rose 1950:39). His son, Job Doan, later rebuilt the tavern and eventually moved it to Cedar Avenue, east of E. 100th Street (Rose 1950:80).

Job Doan also established a cemetery at Doan's Corners in 1823. The "Publick Burying Ground" was located at the northwest corner of Euclid Avenue and E. 105th Street but the plot, which was approximately an acre and a half in size, was not used exclusively for burials. The northern section was used as a cemetery and the southern portion became a village common, with a stone schoolhouse being built on the northwest corner of Euclid Avenue and E. 105th Street in the 1830s (Rose 1950:99-100, 184). Some of this area has been previously investigated archaeologically and will be discussed later in this summary.

A Methodist Sunday School was organized at Doan's Corners in 1831 by Reverend Milton Colt. In 1837 a permanent church was built on Doan Street (present day E. 105th Street). In 1870 a second church was built, which was torn down in 1885 and rebuilt in 1887 on Euclid Avenue at Oakdale Street (present day E. 93rd Street). This Methodist congregation became the Epworth-Euclid United Methodist Church after merging with the Euclid Avenue Methodist congregation and constructing another church between E. 107th Street and Chester Avenue (McMillin 1996; Rose 1950:126).

The township of East Cleveland (distinct from present-day East Cleveland) was organized in 1847. It was annexed into the City of Cleveland in 1872. East Cleveland's western boundary was at Willson Avenue (E. 55th Street), Quincy Avenue to the south, east of Doan Street (E. 105th Street) to the east, and north of Superior Avenue (US 6) to the north. South of East Cleveland was the village of Newburgh (sometimes Newburg), which was annexed into the City of Cleveland in 1873 (Kennedy 1896:337, 421; Rose 1950:366, 388). In summary, development in the eastern area dated to after the mid-1870s.

Central Section

The Nickel Plate (formally the New York, Chicago and St. Louis Railroad) mainline was constructed in 1882. The line ran from Buffalo, New York through Fort Wayne, Indiana to Chicago, Illinois. The line entered Cleveland at the Detroit Avenue area in the west and exited at the Euclid Avenue area in the east. On the east side of the Cuyahoga River, the railroad tracks ran through Kingsbury Run, crossed Willson Avenue (present-day E. 55th Street and Kinsman Road, then turned north to cross Adelbert, Mayfield, and Euclid Avenues. In 1926, there was a large grade elimination project undertaken to lower the Nickle Plate from Kinsman Road to East 93rd Street. In 1964 the Nickel Plate line was taken over by the Norfolk and Western Railroad, which later became Norfolk Southern in the 1980s (Grabowski and Van Tassel 1996).

Plan sheets for the resurfacing of Buckeye Road in 1924 depict details of a four-foot diameter brick sewer throughout the area with notes indicating tie-ins from arterial roads. Sanborn mapping from 1912-1913 also shows waterlines already in-place. The installation of waterlines to provide the residents with an adequate supply of fresh water coincided with the development of drainage sewers in the mid-1800s, and effort to improve the quality of Cleveland life (Alewitz 1996 and Sibley 1996). In an

effort to address rising unsanitary conditions, the city began construction and installation of a public water system and drainage sewers and paving streets by the mid-19th Century. Although rudimentary (i.e. open drains), sewer runs were installed by the city in the mid-1850s to confront the health menace created by uncollected solid waste (Sibley 1996). Construction of a better designed system would begin in the 1890s, which included a sewer tunnel project under Kinsman Avenue (Alewitz 1995 and Lytle 2012). It appears an adequate and substantial sanitary sewer system was in place by the turn of the century which followed a simple open sewer installed decades prior.

A Hungarian settlement in this area of Cleveland had its earliest beginnings in the 1850s with the settlement of David and Morris Black and their families near Woodland and Willson (E. 55th Street) Avenues. Here they started a market garden and later began producing ladies-wear which later became the Lindner Company (Rose 1950; Grabowski and Van Tassel 1996). Hungarian immigration increased dramatically from the 1870s through the 1920s, after WWII, and after the Hungarian Revolution in 1956.

The initial wave of Hungarian immigration in the late 1800s was fueled by a desire for work and/or land. These first immigrants were largely men who settled on what was at the time the eastern outskirt of the city. They lived in boarding houses and worked in nearby factories such as the Eberhard Manufacturing Company, Mechanical Rubber Works, National Malleable Steel Castings, Ohio Foundry, Standard Foundry and Manufacturing Company, Van Dorn Iron Works, Glidden Varnish, and Cleveland Bronze (Papp 1981; Miggins and Morgenthaler 1988). These factories generally developed after 1875 and were positioned along the Nickel Plate or Norfolk Southern rail line in the north, with Kinsman Road to the south. This area is bracketed by E. 75th Street in the west and South Woodland Avenue (Buckeye Road) in the east.

Not surprisingly, residences for the growing Hungarian population built up in this area, mostly in the form of boarding houses until after the turn of the century. Prior to WWI, many Hungarians came to Cleveland with the intention of earning money and returning to their families in Hungary. While many did manage to return home, others settled and stayed in Cleveland. As a result, this area of Cleveland became a distinct Hungarian ethnic enclave. According to Susan M. Papp (1981: 160):

"A distinct Hungarian neighborhood came into being during the mid-1880s. The Hungarians settled around Madison Street (now East 79th) and Woodland Avenue from East 65th Street onward. Streets with particularly heavy concentrations of Hungarian residents included Bismarck, Rawlings and Holton."

After WWI more Hungarians came to Cleveland with the intention of staying. This was fueled by economic hardships caused by WWI and by the significant changes in Hungary's economy, government, and borders resulting from the Treaty of Trianon in 1920. Papp (1981: 170) reports that Cleveland's Hungarian population climbed from approximately 9, 500 in 1900 to over 43, 000 by 1920. In Cleveland, the effect was that Hungarians moving from boarding houses providing temporary housing prior to WWI to homes of permanent residence for working, middle, and even upper class families. Not only were there an increasing number purchasing property but there was also an increase in those becoming United States citizens (Papp 1981: 226). Although some Hungarians lived in the Buckeye Road area, it was not until the second decade of the 20th Century that the Buckeye Road community became known as a distinctive Hungarian Community, extending the community east from the earlier-settled areas around East 79th Street (Papp 1981: 227).

Religious buildings (i.e. churches, synagogues) were constructed to service this population, and Hungarian aid or benefit societies were formed to provide benefits to sick workers or funds for the funerals of immigrants who died far away from their families in Hungary. Thus immigration, ethnic population growth, industrial development, and residential settlement all dramatically affected the proposed preliminary study corridor at this time, transitioning it from an outskirt to an active urban landscape.

Despite immigration waves continuing until the 1956 revolution in Hungary, by the 1970s the Hungarian population had dwindled, replaced largely by African Americans moving into this area of Cleveland. Today, many of the houses from the original neighborhood have been razed (see cover illustrations for an example). Many of the city blocks appear as vacant open space with the occasional abandoned house.

Western Section

The proposed project will cross over Kingsbury Run Valley, which is part of the larger Kingsbury Run watershed characterized by creeks, ravines, and rugged valleys. Kingsbury Run formed a natural boundary between the early city of Cleveland and the hamlet of Newburgh (later Newburgh Township) [Rose 1950:89]. East of E. 79th Street much of Kingsbury Run's waterways have been filled in or bridged by culverts, but west of this point some of the natural valley remains (Grabowski and Van Tassel 1996).

Kingsbury Run made headlines from 1935 to 1939 during the so-called Cleveland Torso Murders. Several of the dismembered victims of the Torso Murderer were found in Kingsbury Run, leading some to dub the killer the "Kingsbury Run Phantom." In particular, one of the victims (known as the "tattooed man") was found near the area where the Kinsman Road bridge crosses over Kingsbury Run Valley, which the proposed roadway also crosses just southwest of Kinsman Road (Nickel 1989:62-64). In the 1930s, Kingsbury Run was home to vagrants and the poorest of the working class, who lived in shanties throughout the area; it was regarded as a dangerous, desolate area. In August of 1938, in an attempt to put a stop to the killings, the shanty towns were burned on the orders of Elliot Ness, who was serving as the Safety Director for the City of Cleveland at the time (Badal 2001:10). Today, at least a third of the area has been redeveloped with interstate systems, railroad lines, and commercial strip development comprising the majority of modern development. Other portions of the Kingsbury Run Valley, particularly in the areas where the shanty towns existed, were filled (largely with slag and industrial spoil) during the 1950s and 1960s. In places, the valley is filled-in entirely. Reported depths of the valley suggest that 15 to 20 feet of fill exists in these areas. In the 1960s, low-income housing was developed in this area as part of the Garden Valley federal urban renewal project (Lytle 2012).

Previously Surveyed Areas and Previously Documented Archaeological Sites

The Ohio Historic Preservation Office's Online GIS System shows several previously identified archaeological sites, surveyed areas, and cemeteries in or near the preliminary study corridor. These can be seen on Figure 5, which shows seven cemeteries, nine archaeological sites, and nine previously surveyed areas. The majority of these cemeteries, sites, and surveyed areas are not in or adjacent to the corridor; these will be documented here only to elaborate on land use history, current conditions, and/or the state of the archaeological record in this area of Cleveland.

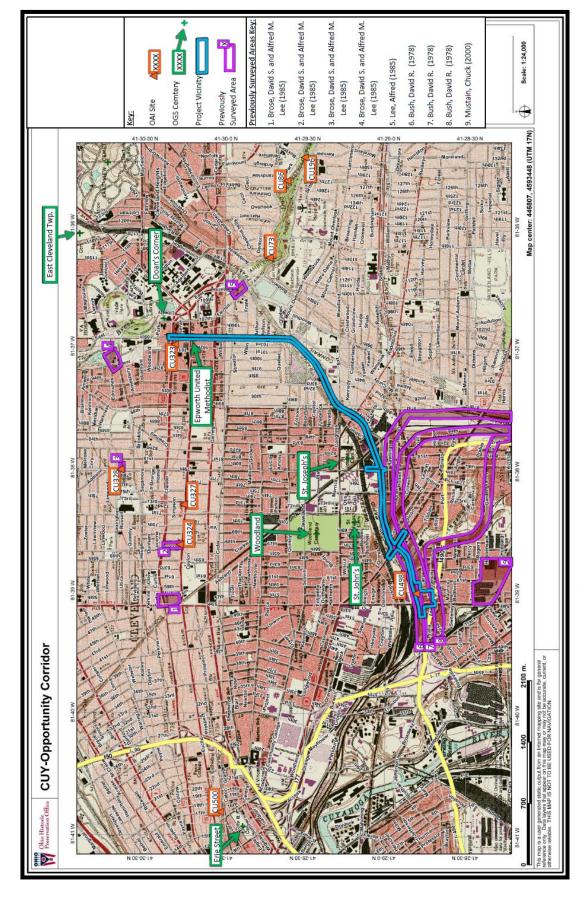


Figure 5. Previously surveyed areas, previously identified archaeological sites, and cemeteries in and around the proposed project area.

Details of the nine archaeological sites, all recorded in the Ohio Archaeological Inventory (OAI), shown on Figure 5 are summarized in Table 2. Seven out of the nine are historic in nature, the remaining two are prehistoric. Only two of these sites are within the preliminary study corridor, sites 33CU323 (beyond the feasible alternative under consideration) and 33CU498 (a portion lies within the proposed footprint). Neither of these sites, however, is considered significant and no further archaeological investigations are required. Both of these sites will be discussed in further detail below.

Table 2. Outline of the archaeological sites shown on Figure 5; shaded sites are in the immediate project vicinity.

OAI#	Name	Affiliation	Artifacts Recovered	Reference
33CU73	Sniper Site	Prehistoric—Woodland	Pottery, flakes	Lee 1985
33CU86	Crompton Site	Prehistoric—Late Archaic or Early Woodland	2 side-notched points	Lee 1985
33CU196	Shaker Millrace Site	Historic—19 th Century	Remnants of a mill race	n/a
33CU323	Doan Block Hotel Dump	Historic—1870s to 1890s	Hotel refuse: ceramics, glass, metal	Brose and Lee 1985
33CU324	Dunham Tavern Grounds	Historic—1840s to 1870s	Ceramics, clay pipes, metal, glass	Brose and Lee 1985
33CU327	Bradley House Grounds	Historic—1880s to 1960s	Builder's trench, cistern, backyard	Brose and Lee 1985
33CU328	Addison Avenue House	Historic—1860s to 1920s	Ceramics, glass, wooden drain	Brose and Lee 1985
33CU498	n/a	Historic—1913 to present	Ceramics, glass, plastic, wire nails, brick frags	Mustain, Terpstra and Bennett 2006
33CU500	n/a	Historic—1880s to 1974	Animal bones, seeds, bricks, nails, glass, ceramics, buttons	Bryant 2007

Both prehistoric sites, 33CU73 and 33CU86, are located on terraces along the stream valley of Doan Brook, which is approximately 2800 feet east of the current preliminary study corridor. Site 33CU73 is a Woodland site comprised of pottery and chert flakes which, according to Lee (1985: 15), are a secondary deposit "eroding from the slumping south wall of the gorge below Fairmont Reservoir." Site 33CU86 is identified as a Late Archaic site consisting of two Lamoka side-notched points, but Lee (1985) later determined that these were more likely Middle Woodland Chesser Notched points.

Sites 33CU196, 323, 324, 327, 328, 498, and 500 are comprised of historic artifacts (and sometimes modern materials) which range in date from the early 1800s to the present day. Two of the sites, 33CU196 (Shaker Millrace Site) and 33CU327 (Bradley House Grounds), record features rather than artifacts. Site 33CU196 is the remaining portion of a millrace that ran to a gristmill that once stood in a ravine to the west of the Kemper Road/Fairhill Road intersection. Site 33CU327 is an intact cistern, a builder's trench, and the backyard of the Bradley House located at the northwest corner of 72nd Street and Euclid Avenue. Very little cultural material other than the features was recovered during shovel test unit excavation at this site.

Sites 33CU323, 324, 327, and 328 are all documented in Brose and Lee's 1985 *A Model of Historical Sites Archaeology in the Inner City*. Site 33CU323 falls within the preliminary study corridor and is located on the northwest corner of the Euclid Avenue/E. 105th Street intersection. In fact, this area is one of the few historically documented areas of early 19th Century development in the study corridor. The original intention of the archaeological testing in this area was to locate Job Doan's barn, which would have dated to the mid-1820s. Instead, remains of a refuse dump associated with a hotel that stood on the site from the late 1800s/early 1900s was uncovered. No cultural material dating earlier than the hotel was located, and the artifacts found included stoneware crockery, yellow ware, salt glazed pottery, plain white glazed ironstone pottery, and beverage container glass. Materials relating to a garage built sometime between 1911 and 1932 were also recovered.

Sites 33CU324, 327, and 328 are not in or adjacent to the preliminary study corridor. Site 33CU327 is described above and is located approximately 1.4 mile west of the northern end of the preliminary study corridor. The Dunham Tavern Grounds, or 33CU324, is located approximately 1.4 mile west of the northern end of the corridor. While the original purpose of the excavations here was to locate the early log cabin thought to have been built here in the 1820, the site instead yielded historical archaeological materials that date to the 1840s and relate to a tavern that stood on the site. More recent materials dating to post-1930s filling and grading activities were also encountered. The Addison Avenue House, or 33CU328, was intended to locate a small frame single family residence built in the late 1860s. While some ceramic and glass materials were found that date to this period, the site was severely disturbed by grading and drainage repairs.

Site 33CU498 is located on the north side of Bower Avenue just east of the 55th Street intersection. A portion of this site lies within the proposed footprint of the Opportunity Corridor project. The site represents a scatter of modern (1913 to 1980) domestic refuse across a former residential lot and related to two residential structures that stood on the site in the early 20th Century. The artifacts were confined to a layer of fill measuring up to three feet thick. The entire site was also top-dressed with a thin layer of sand. At least the first 1.5 foot of the site was a mix of modern material and structural rubble. Today, the site has been eradicated by the construction of a bus loop and parking facility for an RTA station (Figure 6).

Finally, site 33CU500 is located approximately two miles west of the current preliminary study corridor. Phase I, II, and III investigations here identified two row houses and associated outbuildings/structures dating to the 1880s through the 1920s. The OHPO Online GIS System indicates that this site is eligible for inclusion on the National Register of Historic Places. This site is also within the boundaries of the Euclid Avenue Historic District (NR #07000524). Archaeological investigations were conducted by Gray & Pape, Inc., who used information from the excavations in an attempt to answer questions about the socioeconomic conditions of the occupants, the association between the main residence buildings and the outbuildings, and the nature of the archaeological record in urban Cleveland. In regards to the latter, they determined that the parking lot/urban setting of the site preserved the structural foundations of the residential row houses and the outbuildings, but that deposits were relatively mixed due to construction and demolition activity.

Several previously surveyed areas are located in this area of Cleveland, though the majority are not within or adjacent to the preliminary study corridor. There are a total of nine previously surveyed areas shown on Figure 5, which represent four archaeological surveys. The surveyed areas north of the study corridor, labeled 1-5, have already been discussed elsewhere in this study: Lee (1985) and Brose

and Lee (1985). The remaining surveyed areas, labeled 6-9, are located at the southwestern end of the study corridor and represent the following two archaeological surveys.

David Bush (1978) conducted an archaeological survey for the I-490 Project, which was intended to connect I-77 at the E. 55th Street intersection to I-480 at the Broadway Road exit. Three alternatives were tested, the Erie-Lackawanna (labeled 8 on Figure 5), the Penn-Central (labeled 7 on Figure 5) and the Special Use Reversible (labeled 6 on Figure 5). The preliminary CUY-Opportunity Corridor study corridor overlaps with all three alternatives at its western end. According to Bush (1978), shovel test excavation, visual inspection, and interviews with residents indicated that there were no prehistoric or historic archaeological resources located within the project area due to construction activity and urban development.

Chuck Mustain (2000) conducted an archaeological survey for the Bessemer Avenue Extension project between E. 55th Street and E. 65th Street in Cleveland (Figure 5). It is located approximately 1800 feet south the preliminary CUY-Opportunity Corridor study corridor. Fieldwork for this survey included visual inspection and soil coring, which showed that the project area was largely disturbed by industrial development. Mustain concluded that no archaeological resources are located in the project area and recommended no further archaeological investigation.



Figure 6. Aerial photo (2012) showing the intersection of I-490, East 55th Street, Bower Avenue and the reported location of site 33CU498.

ARCHAEOLOGICAL FIELD REVIEW

The Office of Environmental Services conducted an archaeological field review/disturbance assessment on two separate occasions: December 2011 and October 2012. These investigations were designed to: 1) document the condition and physical scope of the area; and 2) determine the need for further investigations and the types of investigations required. The investigations involved visual inspection, soil coring, and creating a photographic record of physical conditions and the disturbances encountered throughout the project area. These investigations were focused within the proposed project footprint and areas immediately adjacent to it. The field review summary is divided into three sections along the proposed preferred as outlined in the context and literature review sections of this report.

Western Section

The Western Section encompasses areas between the western terminus of I-490 and E. 79th Street. The area between East 55th and the Kingsbury Run Valley is dense residential development (Figure 7). From the Kingsbury Run Valley to East 79th, standing residential buildings are much lighter, a result of years of razing abandoned houses through these neighborhoods. Large areas of gravel parking (where houses once stood) and areas of extensive fill/dumping are present throughout this section (Figures 8). These disturbances continue to the bluff edge of the Kingsbury Run Valley (Figure 9). From East 75th Street to east 79th, the proposed roadway crosses open, grass covered lots containing the occasional house. Expansive areas of fill across this area (following Rawlings Avenue) were observed four to five feet above street level and portions currently used for parking (Figure 10).



Figure 7. Oblique aerial photo looking east showing portions of the Western Section.



Figure 8. View looking southwest along East 68th Street toward Kinsman Road showing areas disturbed by gravel parking areas and fill.



Figure 9. View looking southwest showing areas previously disturbed by residential development and roadway construction. Kingsbury Run Valley is in the background.



Figure 10. View looking east-northeast showing areas along Rawlings Avenue previously disturbed by fill.

Central Section

The Central Section extends from E. 79th Street to Quincy Avenue. The alignment crosses several areas of industrial development and associated parking lots. The new roadway will cross over East 79th across disturbed lots (fill and the former location of the Carlin Rivet Works) toward the former Van Dorn Iron Works, across the Norfolk Southern railway line, and through the former Glidden Varnish and Cleveland Rubber Company grounds. Many of these late 19th/early 20th Century industrial complexes are currently being demolished (Figure 11). Portions of this area were densely populated at one time with residences tightly spaced throughout. Furthermore, much of the residual area is vacant open space with the occasional abandoned house.

The new roadway then enters the former residential neighborhood of the Hungarian community once focused along Buckeye Road. The Opportunity Corridor project will impact approximately six square blocks of this once larger community. The neighborhood is bracketed east and west by the Nickel Plate mainline and Tennyson Road and north to south by Buckeye Road and the Norfolk Southern railway line. Western portions of the Hungarian neighborhood have been eradicated by industrial development, particularly southwest of Evins Avenue and Evarts Road. Evidence of structure removal and subsequent filling is present across the entire neighborhood. Review of aerial photography as late as the 1970s indicated that the majority of residences in this area have been removed. Large areas of fill (i.e. four to six feet) cover former lots between Lisbon Road and Grand Avenue. On the northwest corner of Evins Avenue and Grand Avenue exists a gravel parking area situated on fill covering five to six residential lots along Grand Avenue (Figure 12). At the rear of this parking area lies approximately six feet of fill (composed mainly of stone, concrete, rubble, and industrial and residential refuse) [Figure

13]. Directly east of Grand Avenue and south of Evarts Road is a large parking lot/service area for the former Eberhard Manufacturing Company. This lot composed of modern fill lies between two to three feet above street level. The northeast corner of Grand Avenue and Evarts Road (north of the former Eberhard Manufacturing) contains a house depression on the first lot. Structures on the second through fourth lots have been razed and the lots filled with three feet of rubble fill (Figure 14). The rear of these lots have been recently disturbed (bulldozed when the houses were removed and again during leveling of the fill).



Figure 11. Aerial photo (2012) showing the demolition of the industrial complexes in the Central Section (lower left and lower right) and typical modern land-use patterns in the former Hungarian neighborhood (upper right).

Only one residence exits on the west side of Tennyson Road; all other structures have been removed within the last 30 to 40 years. With the aid of soil coring, multiple episodes of fill were observed south of Buckeye Road: the first three lots with two to three feet; the next eight (approximately) with four to five feet (Figure 15). The uppermost layer of fill consisted of a light yellowish brown sandy soil with rubble (mainly residential debris) and refuse (Figure 16). Brick pavers and concrete block in the rear of the lots suggest garages or large outbuildings (storage sheds) resided on the edges. Sanborn mapping confirms that by 1912, several lots contained structures in these areas. Those soil cores able to reach below the depths of the fill and not come into contact with former structures encountered 1.4 feet of very loose, very dark gray soil with a large amount of cinder and rock (Figure 17). Brick fragments and rock were prevalent at the bottom of the core. Rock or concrete inhibited coring to further depths. The eastern stretch of the Central Section (areas between Woodland Avenue and Quincy Avenue) has been extensively disturbed by industrial development, an auto salvage yard and a construction material storage yard (Figure 18).



Figure 12. View looking north-northeast showing areas previously disturbed by parking lot construction.



Figure 13. View looking north showing areas between Grand Avenue and Lisbon Road disturbed by fill.



Figure 14. View looking northwest showing areas disturbed by multiple episodes of filling activity.



Figure 15. View looking north from Tennyson Road showing areas of new fill and a small unfilled depression over older episodes of fill.



Figure 16. View looking southwest along Tennyson Road showing areas of fill.



Figure 17. Photograph of a soil core showing typical disturbed soil profile encountered below fill layer.



Figure 18. Oblique aerial photo looking north showing the eastern portion of the Central Section and areas between Woodland Avenue and Quincy Avenue.

Eastern Section

The eastern section of the proposed project encompasses areas along East 105th Street between Quincy Avenue and Chester Avenue. Extensive residential and commercial development exists on either side of east 105th to the University Hospital area on the northern end of the project (Figure 19). Minor strip right-of-way (at the most) will be taken from areas adjacent to the existing right-of-way previously disturbed by modern commercial and residential development, roadway construction, and underground utility installation (Figures 20 and 21). Therefore, the proposed construction would only impact the front of residential and commercial lots along East 105th Street, which have already been previously disturbed by roadway and underground utility work. The extent of ground disturbance in these areas preclude the presence of intact archaeological deposits.

Areas around Doan's Corners (East 105th and Euclid Avenue) have been extensively disturbed by waves of redevelopment associated with early 20th Century commercial properties and hospital expansion and development (see Figure 19). While Doan's 1799 cabin was located to the east of the



Figure 19. Oblique aerial photo looking east showing areas along East 105th Street disturbed by modern development.



Figure 20. View looking north along East 105th Street just north of the Norman Avenue/East 105th Street intersection.



Figure 21. View looking south along East 105th Street at its intersection with Euclid Avenue.

project area (in the northwest quadrant of present-day Euclid Avenue and Stokes Boulevard), an 1830s stone school house was reported as being situated in the northwest quadrant of East 105th and Euclid Avenue (Rose 1950). Review of the 1903 15' topographic map shows several buildings around East 105th and Euclid. One is obviously the Doan Block Hotel, the dump of which Brose and Lee (1985) encountered and investigated. By 1963, a very large building is depicted and encompasses nearly the entire quadrant. The 1994 7.5' USGS topographic map depicts another, smaller building at the location. Today, the Ronald MacDonald House occupies more than half of the block (see Figure 19; Figure 22). Therefore, at least four waves of commercial development have occurred in the vicinity of the East 105th Street/Euclid Avenue intersection, precluding any intact remains relating to early 19th Century settlement and use of the area. Areas where temporary right-of-way is needed north of Euclid Avenue and Chester Avenue have been further disturbed by recent landscaping activities (Figure 23).



Figure 22. View looking south across a portion of the Ronald McDonald House toward Euclid Avenue.



Figure 23. View looking northeast toward East 105th Street from its intersection with Chester Avenue.

Discussion

The vast majority of the project area has experience several waves of redevelopment. Across the entire project area, extensive ground disturbance and human altered/transported soils are evident. The USDA/SCS soil survey confirms these disturbances in its documentation and description of the urban soils and udorthents found throughout the area. Archaeological remains in such a context will be limited to architectural debris brought in with full or articles from a homogenous, post-industrial origin. Based on the context provided in this report and the results of the archaeological field review, common use of privies and wells is unlikely. Locating and investigating such features are made even more difficult by the extensive fill applied to the area, particularly in the Buckeye Road neighborhood. Based on these findings, no further archaeological investigations are recommended for the proposed Opportunity Corridor project as currently planned.

SUMMARY AND RECOMMENDATIONS

An archaeological resource review and disturbance assessment was conducted by the Ohio Department of Transportation, Office of Environmental for the proposed Opportunity Corridor project. The Opportunity Corridor project study area was divided into three sections (western, central, and eastern) and a historic context was developed for each section. Two previously recorded archaeological sites were identified in the vicinity of the project area during the literature review, but only one was located in the proposed footprint. Site 33CU498, a modern-era domestic refuse scatter, has been eradicated by the construction of an RTA bus loop and parking facility. Background research also identified two prominent historic themes: the history of Nathanial Doan and Doan's Corner in the Euclid Avenue/East 107th Street area (eastern section) and the history of a former Hungarian neighborhood located near Buckeye Road (central section). These two themes were investigated further by the Office of Environmental Services once a preferred alignment was identified.

Review of aerial photography and cartographic resources suggests the entire project area has been heavily developed and redeveloped over the last 60 years. An archaeological field review performed in December 2011 and October 2012 confirmed widespread disturbance as a result of industrial, commercial, and residential development, transportation development and construction, cut-and-fill activities, and storage yard development. No further prehistoric archaeological investigations are recommended.

The area of Doan's Corner at the eastern termini has been thoroughly disturbed, specifically as a result of Hospital expansion and development (along with associated underground utilities). Inspection of the project area (the footprint of the proposed project) through the Hungarian neighborhood/Buckeye Road area determined that three to six feet of fill had been placed across the area, specifically between Grand Avenue and Tennyson Road. Several houses in the area had been recently razed and evidence of bulldozing was observed across the area as well.

Based on the amount of disturbance documented in the area and the nature of urban land and udorthents, archaeological remains would consist mainly of mixed, post-industrial and modern deposits with no real physical distinction between traditional/cultural expressions in the archaeological record. Much of the fill observed during the field review contained construction debris from the razing of structures both within the area and outside, which was brought in with fill, subsequently creating a blended archaeological context.

Background research also reveals a substantial amount of documentation on the material culture of the Hungarian population and the daily life in the Buckeye Road area. Further archaeological investigations along the proposed project's footprint in the Buckeye Road area are unlikely to yield significant information beyond that which other researchers have presented. Therefore, no further archaeological investigations are recommended. However, this recommendation does not preclude the existence of significant archaeological remains in other areas beyond the preferred alternative relating to the Hungarian population and earlier patterns of land-use over the last 12,000 years. It is likely, that important information can be recovered in other, better preserved parts of the neighborhood. Therefore, if the scope of the proposed Opportunity Corridor project changes, further archaeological consideration would be required.

REFERENCES

Alewitz, S.

1996 Sanitation. In, *The Encyclopedia of Cleveland History*, edited by J. Grabowski, D. Van Tassel. Indiana University Press, Bloomington Indiana.

Badal, J. J.

2001 *In the Wake of the Butcher: Cleveland's Torso Murders.* Kent, OH: Kent State University Press

Brockman, S.

1998 *Physiographic Regions of Ohio (map).* Division of Geological Survey, Ohio Department of Natural Resources, Columbus.

Brose, D.

1996 Prehistoric Inhabitants. In, *The Encyclopedia of Cleveland History*, edited by J. Grabowski, D. Van Tassel. Indiana University Press, Bloomington Indiana.

Brose, D. S. and A. M. Lee

1985 A Model of Historical sites Archaeology in the Inner City. Unpublished research report on file at the Ohio Historic Preservation Office.

Bryant, D.

2007 Phase II National Register Evaluation and Phase III Data Recovery of Archaeological Site 33CU500 Cuyahoga County, Ohio. Unpublished research report on file at the Ohio Historic Preservation Office.

Bush, D. R.

1978 An Assessment of the Archaeological Resources for the Proposed I-490 Project, Cuyahoga County, Ohio. Unpublished research report on file at the Ohio Historic Preservation Office.

Cherry, P. P.

1921 The Western Reserve and Early Ohio. R. L. Fouse, Akron.

Grabowski, J. and D. Van Tassel

1996 Encyclopedia of Cleveland History, Indiana University Press, Bloomington, IN.

Kennedy, J. H.

1896 History of Cleveland. Cleveland, OH: The Imperial Press.

Lee, A. M.

1985 Archaeological Reconnaissance in the Cedar/Fairhill Project Area, Cleveland, Ohio. Unpublished research report on file at the Ohio Historic Preservation Office.

Lytle, A.

2012 Kingsbury Run. *Cleveland Historical*. Electronic document, accessed October 24, 2012, http://clevelandhistorical.org

McMillin, J.

1996 Epworth-Euclid United Methodist Church. In, *The Encyclopedia of Cleveland History*, edited by J. Grabowski, D. Van Tassel. Indiana University Press, Bloomington Indiana.

Miggins, E. M., and M. Morgenthaler

1988 The Ethnic Mosaic. In *The Birth of Modern Cleveland, 1865-1930*, edited by T. F. Campbell and E. M. Miggins. Western Reserve Historical Society, Cleveland.

Mills, W.C.

1914 Archaeological Atlas of Ohio, Ohio State Archaeological and Historical Society, Columbus, OH.

Murphy, J. L.

1968 Colonel Charles Whittlesey and Cleveland's forgotten hilltop forts. *The Explorer*, vol. 10, no. 4, pp. 26-29.

Mustain, C., D. Terpstra, and A. Bennett

2006 Phase I Cultural Resources Survey for the Proposed E. 55th Street Station in Cleveland, Cuyahoga County, Ohio. Unpublished research report on file at the Ohio Historic Preservation Office.

Mustain, C.

2000 Memo-to-File/Photolog: Disturbance Assessment of the Bessemer Avenue Extension (PID 20329) in Cleveland, Cuyahoga County, Ohio. Unpublished memo on file at the Ohio Historic Preservation Office.

Nickel, S.

1989 Torso: The Story of Elliot Ness and the Search for a Psychopathic Killer.

Papp, S. M.

1981 Hungarian Americans and Their Communities of Cleveland. Cleveland State University, Cleveland.

Rose, W. G.

1950 Cleveland: The Making of a City. Cleveland, OH: The World Publishing Company.

Sibley, W. E.

1996 Water System. In, *The Encyclopedia of Cleveland History*, edited by J. Grabowski, D. Van Tassel. Indiana University Press, Bloomington Indiana.

USDA/SCS

1980 Soil Survey of Cuyahoga County, Ohio. USDA: Washington, D.C.

USDA, NRCS (United States Department of Agriculture, Natural Resources Conservation Service)

2008 Online Web Soil Survey. Electronic document,

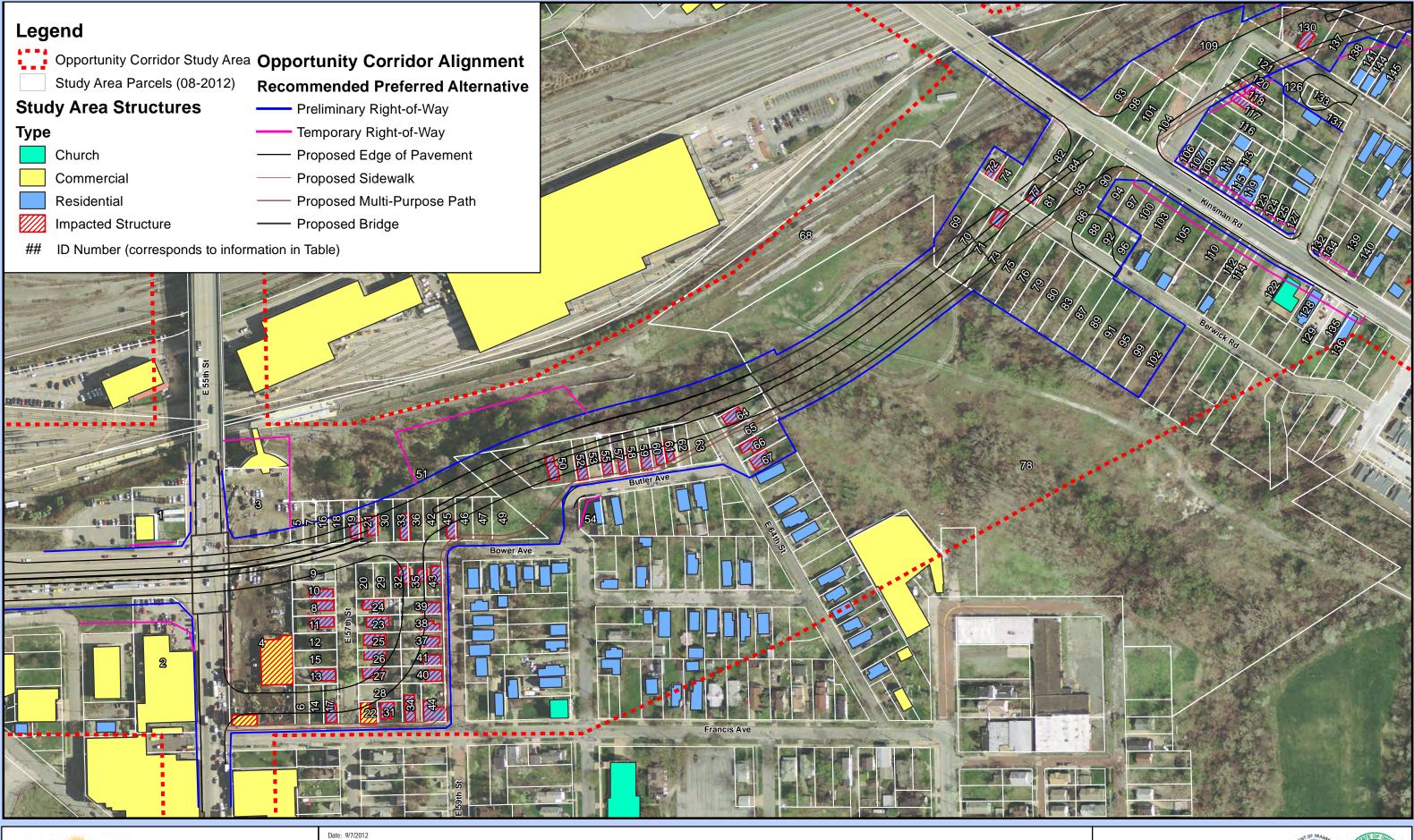
http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Whittlesey, C.

Prehistoric Inhabitants. In *Early History of Cleveland, Ohio*, pp. 29-45. Fairbanks, Benedict & Company, Cleveland.

Appendix A

Preliminary Schematic Plan Sheets for the Opportunity Corridor Project





CUY - Opportunity Corridor (PID 77333) Cleveland, OH

Note:
GIS data used to create this map are from the best sources available. Use of this map should be used only for planning purposes.

Aerial image is dated (circa 2011) and is shown only for illustrative purposes.

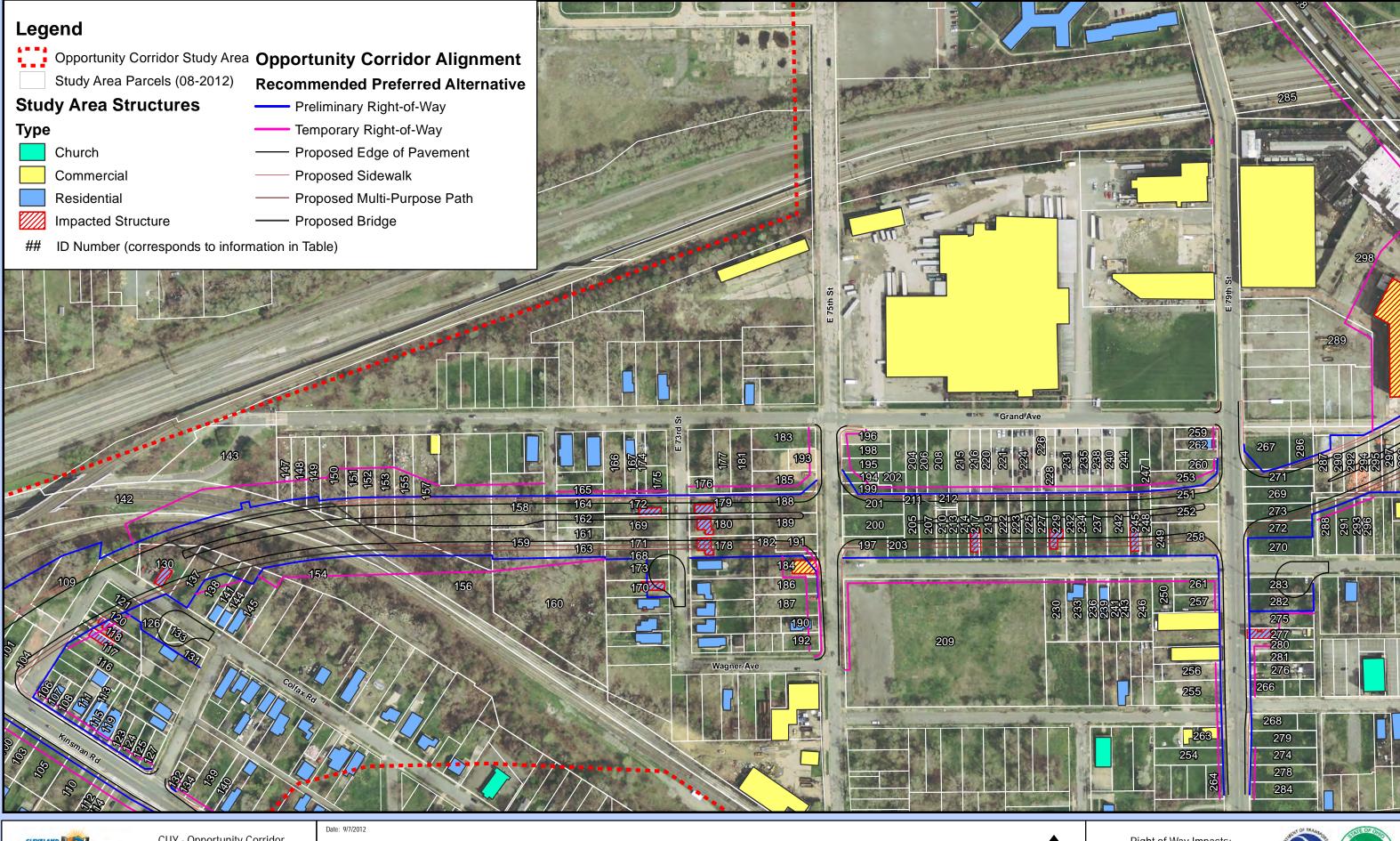
Existing structures were confirmed through a field visit performed on 08/02/2012.





Right of Way Impacts: Page 1 of 6







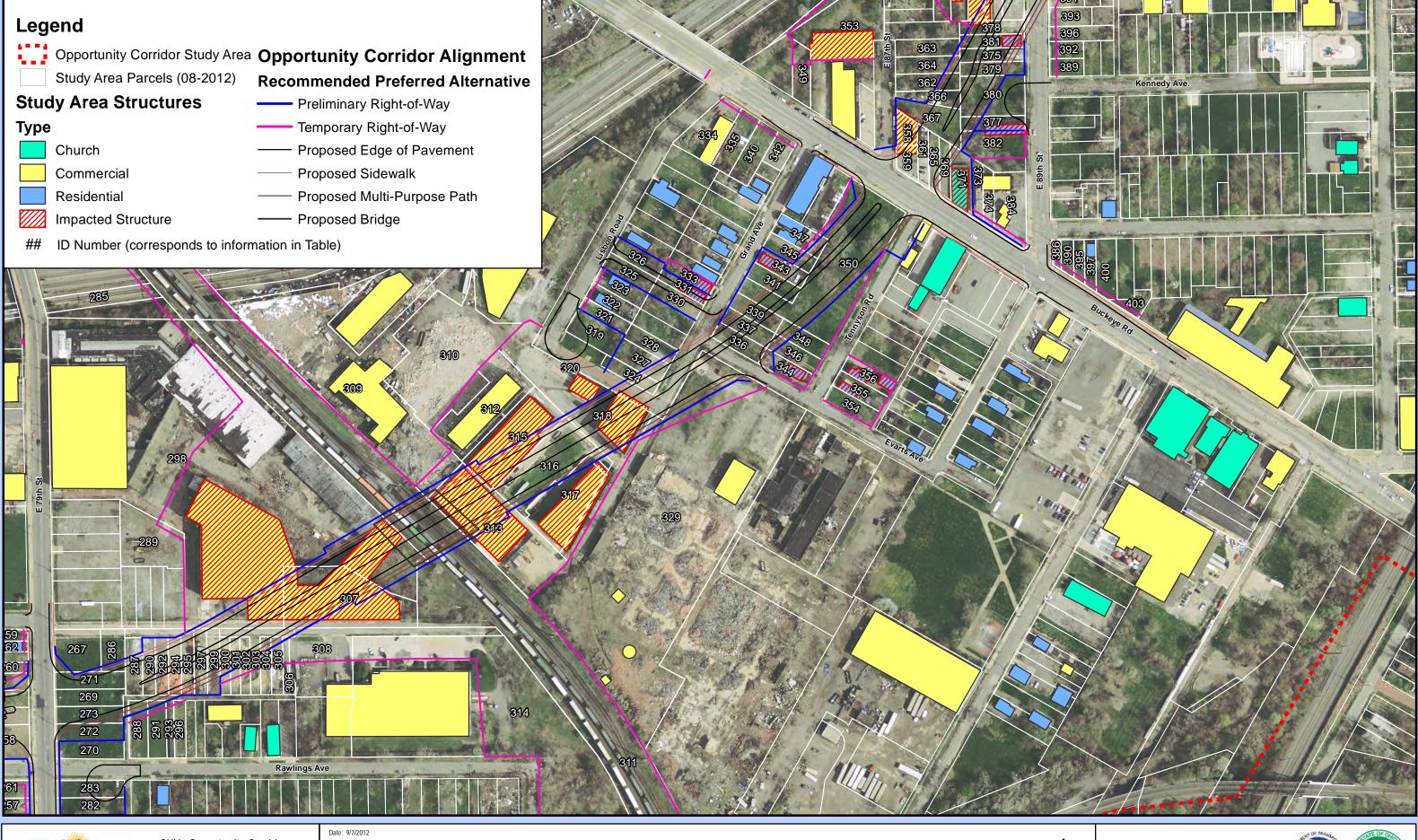
Note:
GIS data used to create this map are from the best sources available. Use of this map should be used only for planning purposes.
Aerial image is dated (circa 2011) and is shown only for illustrative purposes.
Existing structures were confirmed through a field visit performed on 08/02/2012.





Right of Way Impacts: Page 2 of 6



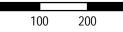




Note:
GIS data used to create this map are from the best sources available. Use of this map should be used only for planning purposes.

Aerial image is dated (circa 2011) and is shown only for illustrative purposes.

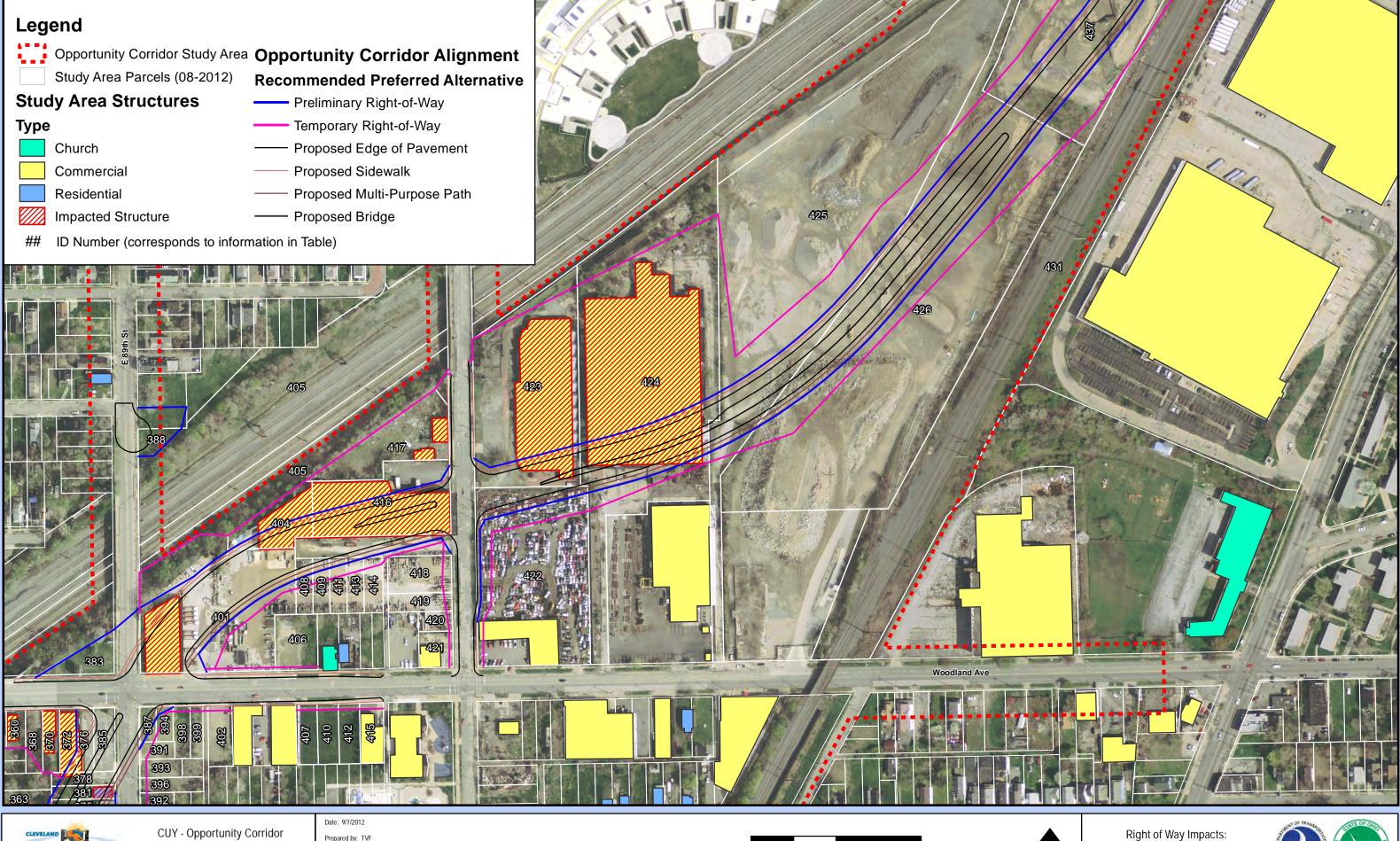
Existing structures were confirmed through a field visit performed on 08/02/2012.





Right of Way Impacts: Page 3 of 6







Note:
GIS data used to create this map are from the best sources available. Use of this map should be used only for planning purposes.

Aerial image is dated (circa 2011) and is shown only for illustrative purposes.

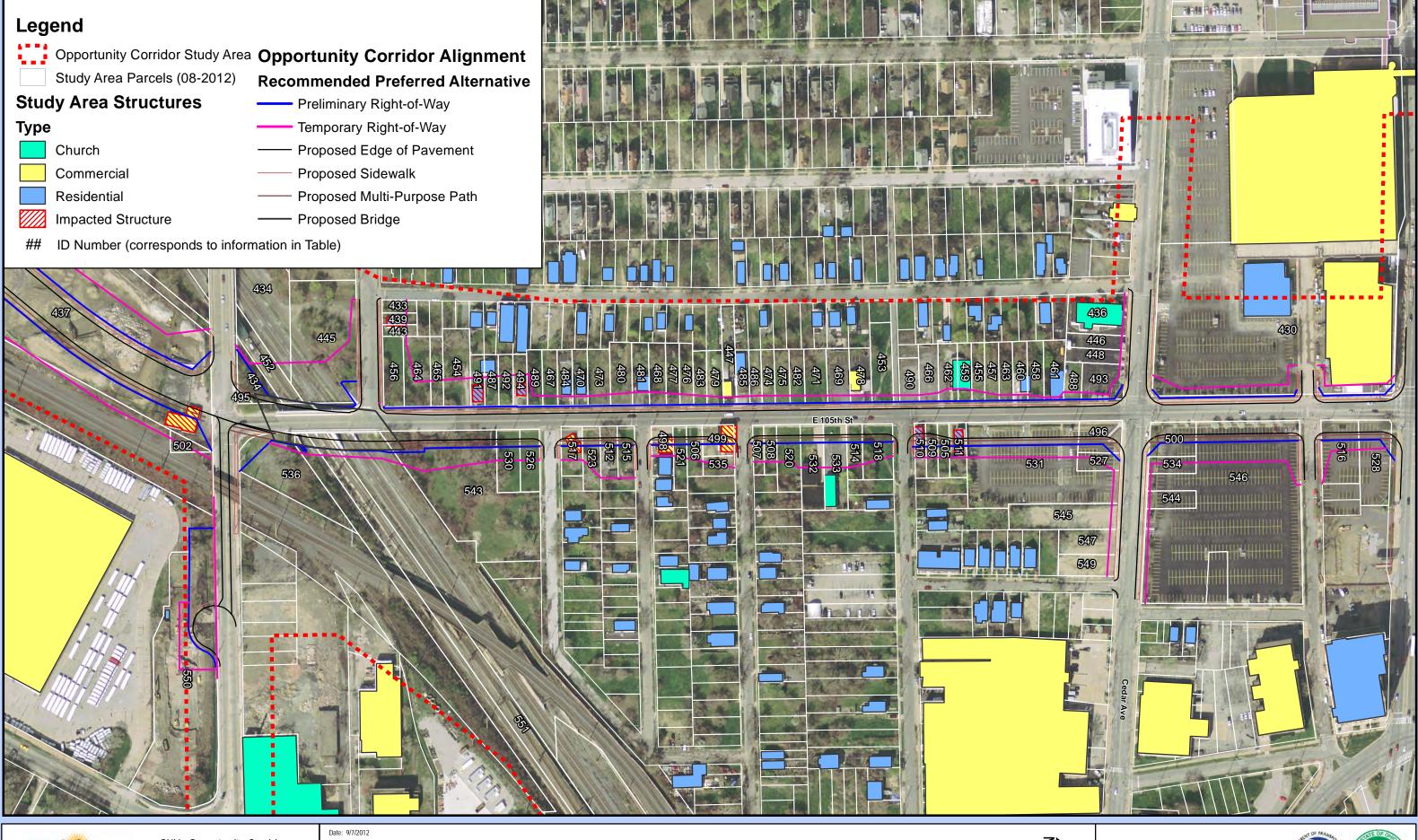
Existing structures were confirmed through a field visit performed on 08/02/2012.





Right of Way Impacts: Page 4 of 6







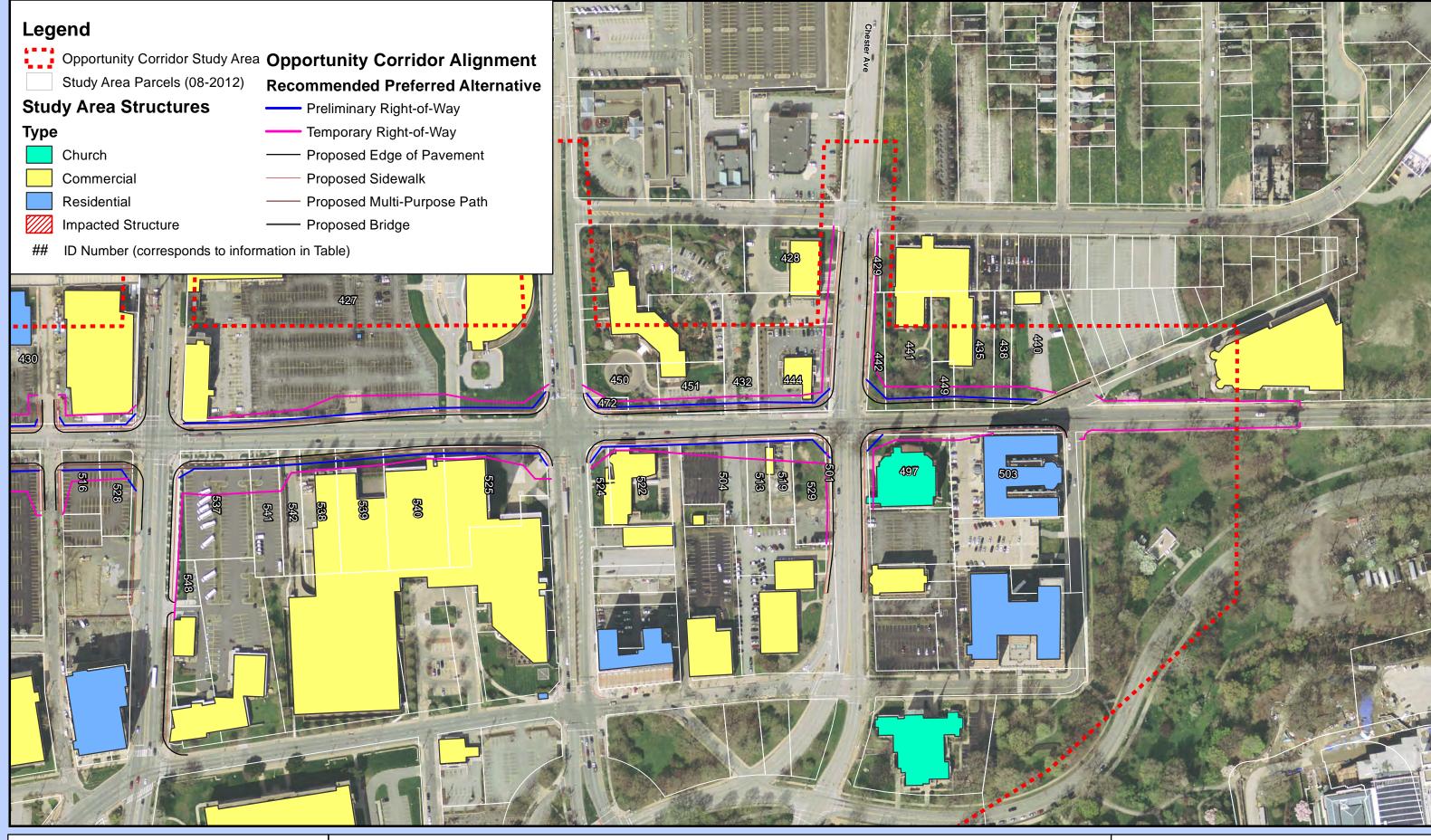
Note:
GIS data used to create this map are from the best sources available. Use of this map should be used only for planning purposes.
Aerial image is dated (circa 2011) and is shown only for illustrative purposes.
Existing structures were confirmed through a field visit performed on 08/02/2012.





Page 5 of 6







Date: 9/7/2012

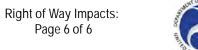
Note:
GIS data used to create this map are from the best sources available. Use of this map should be used only for planning purposes.

Aerial image is dated (circa 2011) and is shown only for illustrative purposes.

Existing structures were confirmed through a field visit performed on 08/02/2012.



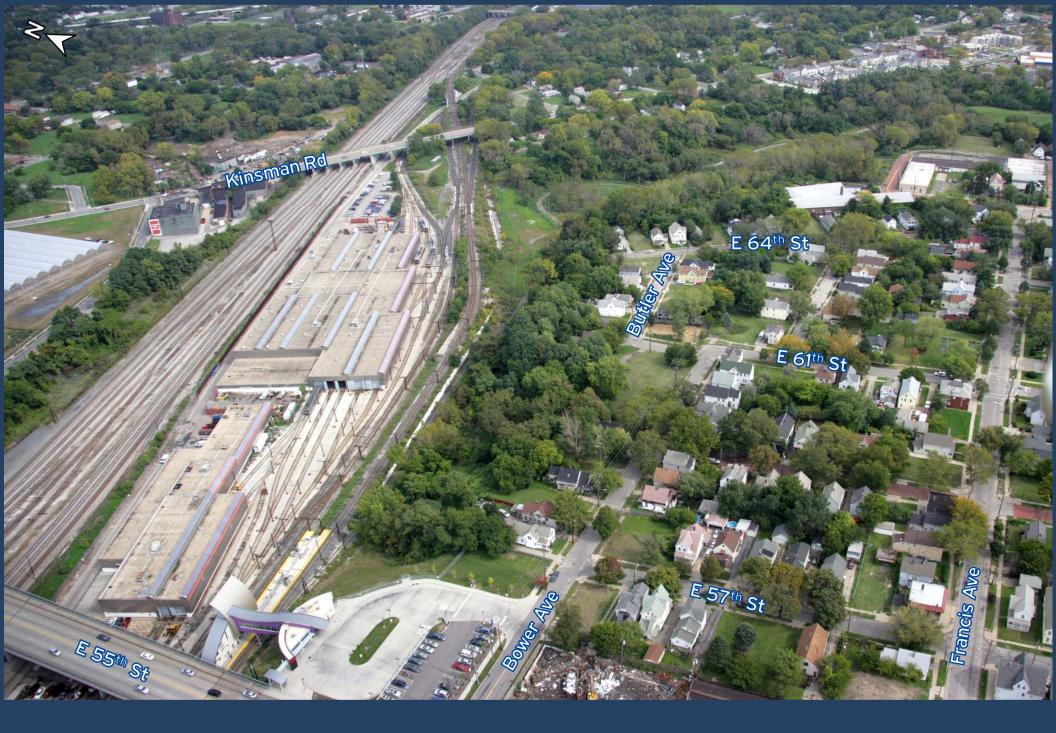




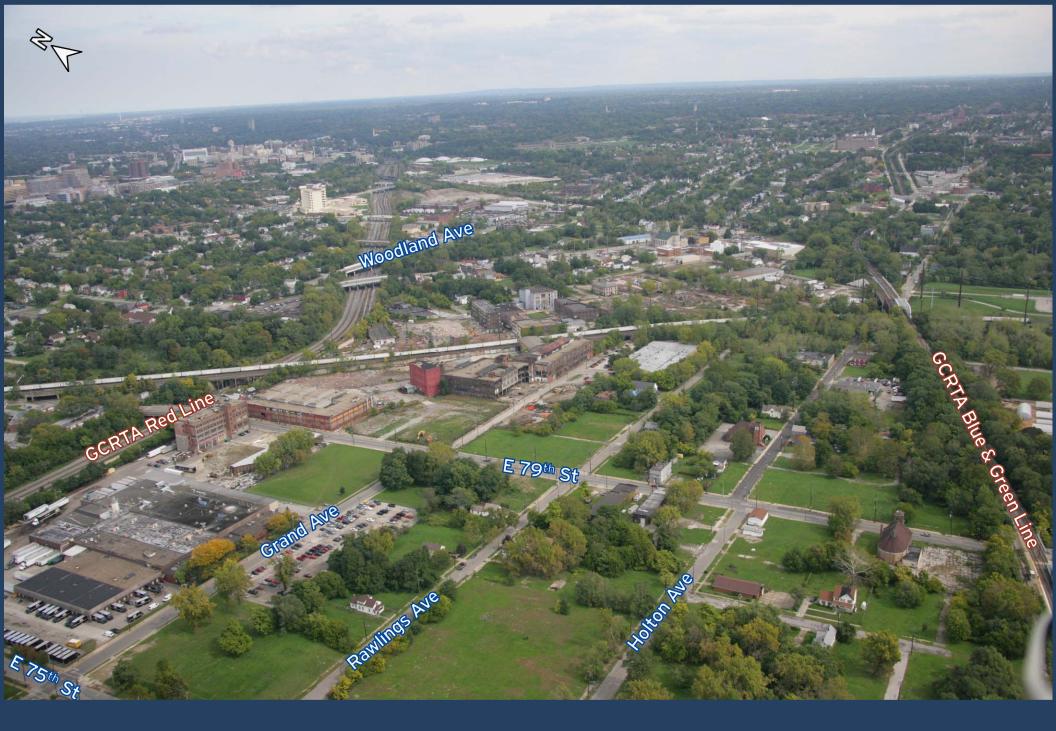


Appendix B

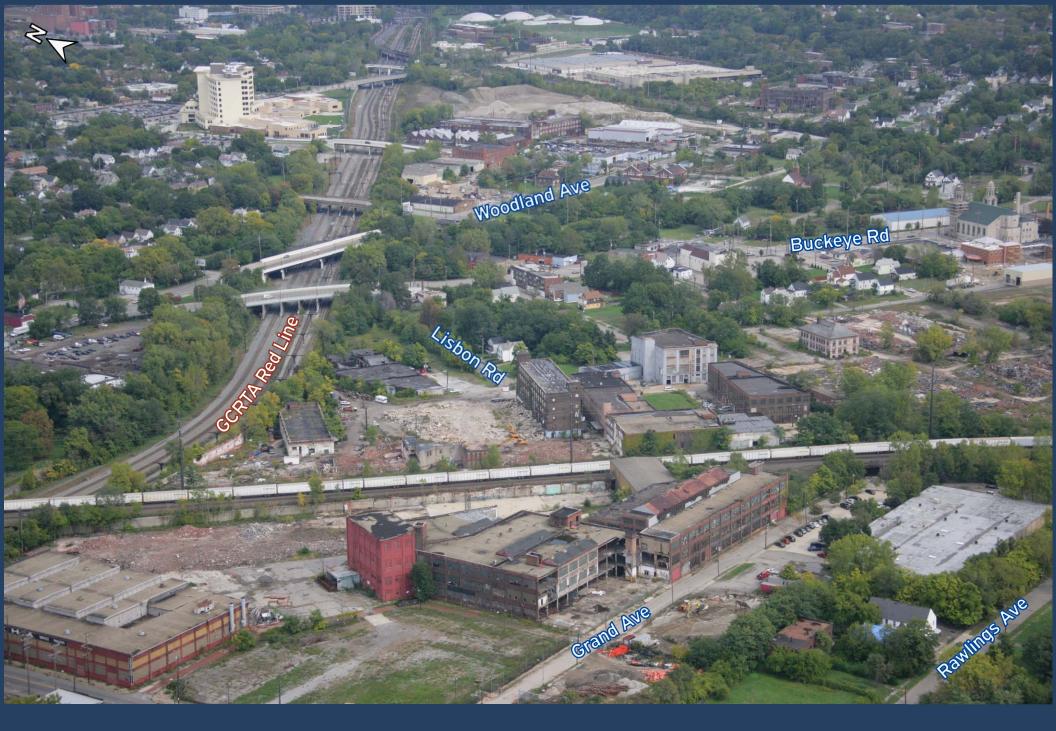
Oblique Aerial Photos taken in Fall 2012



The number of vacant parcels increases at the northern edge of the St. Hyacinth neighborhood.



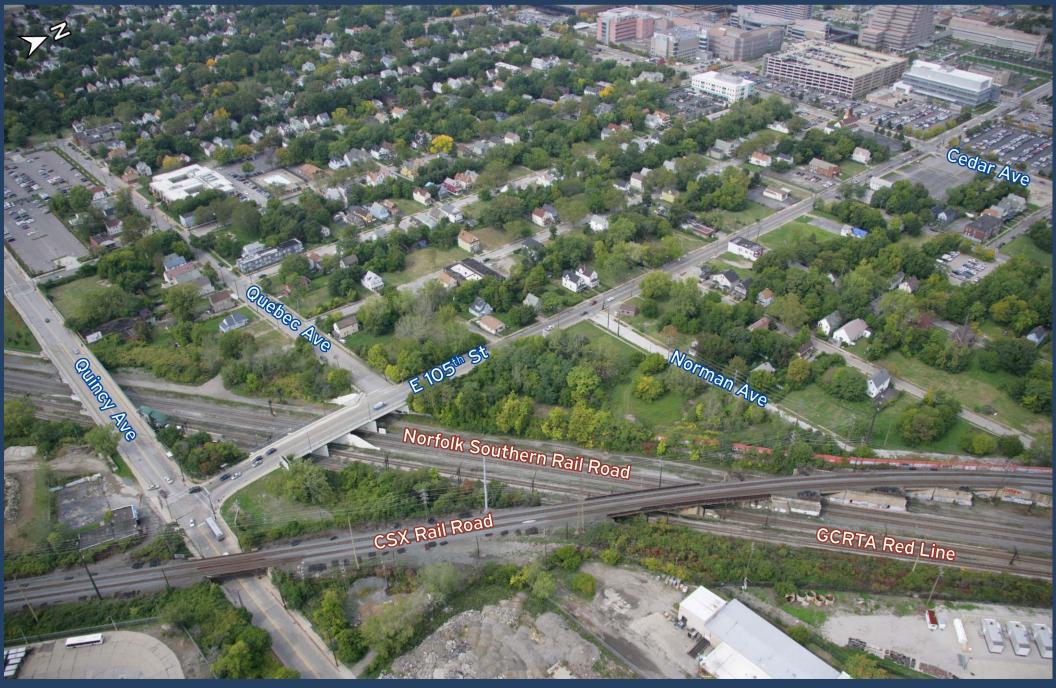
Large amounts of vacant land with isolated residential and commercial structures are present in the area near E 79th Street and Rawlings Avenue.



Abandoned and partially demolished industrial properties are present in the Grand Avenue and Lisbon Road areas between Buckeye Road and E 79th Street.



Polluted Industrial property within the project's footprint would be mitigated in accordance with the local, state and federal laws.



Vacant land and scattered residential and commercial development is present along E 105th Street between Quincy Avenue and Cedar Avenue.

The Norfolk-Southern, CSX and GCRTA rail lines add complexity to the roadway network near E105th Street and Quincy Avenue.



Large institutional and residential development has occurred in the Greater University Circle area.